

T-Mobile International AG & Co KG
Postfach 301661, 53196 Bonn

Radio Spectrum Policy Group
Secretariat
Brussels

Per email to the RSPG mailbox: Info-rspg@cec.eu.int

Contact Karl-Heinz Laudan, Public & Regulatory Affairs
Direct Telephone: +49 228 936-15230
E-Mail: Karl-Heinz.Laudan@t-mobile.net
Date 12 July 2006
Subject T-Mobile response to the RSPG Opinion on „The Introduction of Multimedia Services in particular in the frequency bands allocated to the broadcasting services“

Dear Madams and Sirs,

T-Mobile welcomes the opportunity to comment on RSPG's opinion on „The Introduction of Multimedia Services in particular in the frequency bands allocated to the broadcasting services“.

T-Mobile agrees with the RSPG opinion that the "spectrum dividend" resulting from the switchover to digital broadcasting presents important potential for the European Union. Initiative on the European level is needed to support a timely usage of this spectrum dividend as well as to develop a harmonized framework to facilitate the introduction of potential new services. European harmonization of spectrum use in these bands will improve the internal market for manufacturers, network operators, service providers and consumers.

At the same time Member States should be given a certain degree of flexibility to meet the diversity in needs and objectives to best serve national needs. The application of the European policy approach on spectrum management will increase the flexibility and efficiency of spectrum use in these bands and improve the access to that spectrum for new and innovative services.

T-Mobile agrees that the increasing convergence of traditional broadcasting and communication services in a mobile environment requires changes in spectrum management and licensing regimes. With respect to content regulation the RSPG cites the on-going review of the Television without Frontiers Directive. T-Mobile believes that many of the proposed revisions to the directive are contrary to the RSPG's aim to remove obstacles for the rapid introduction of multimedia services.

T-Mobile International AG & Co KG
Landgrabenweg 151, 53227 Bonn
Postfach 301661, 53196 Bonn
Telefon: (0228) 936-0, Telefax: (0228) 936-19360, Internet: www.t-mobile.net
Commerzbank AG Bonn, Konto Nr. 11 55 100, BLZ 380 400 07, IBAN: DE05380400070115510000, SWIFT-Code: COBADEFF380
Amtsgericht Bonn, HRA 5763
206/5809/0360
DE 813658190

T-Mobile International AG
Kai-Uwe Ricke (Vors.)
René Obermann (Vors.), Harnid Akhavan, Robert Dotson, Ulli Gritzuhn, Michael Günther, Lothar A. Harings, Timotheus Höttes
Thomas G. Winkler
Amtsgericht Bonn, HRB 12276

Hausanschrift
Postanschrift
Telekontakte
Bankverbindung
Eintrag
Steuer-Nr.
Umsatzsteuer Nr.
Persönlich haftende
Gesellschafterin
Aufsichtsrat
Vorstand
Eintrag

Empfänger Radio Spectrum Policy Group
Datum 12 July 2006
Seite 2

T-Mobile welcomes the opportunity for further discussion with the RSPG on the issues raised in our response. Please feel free to contact us in the case of any questions.

Yours sincerely,



Wolfgang Kopf
Executive Vice President
Public & Regulatory Affairs

Attachment

Hausanschrift	T-Mobile International AG & Co KG
Postanschrift	Landgrabenweg 151, 53227 Bonn
Telekontakte	Postfach 301661, 53196 Bonn
Bankverbindung	Telefon: (0228) 936-0, Telefax: (0228) 936-19360, Internet: www.t-mobile.net
Eintrag	Commerzbank AG Bonn, Konto Nr. 11 55 100, BLZ 380 400 07, IBAN: DE05380400070115510000, SWIFT-Code: COBADEFF380
Steuer-Nr.	Amtsgericht Bonn, HRA 5763
Umsatzsteuer Nr.	206/5809/0360
Persönlich haftende Gesellschafterin	DE 813658190
Aufsichtsrat	T-Mobile International AG
Vorstand	Kai-Uwe Ricke (Vors.)
Eintrag	René Obermann (Vors.), Hamid Akhavan, Robert Dotson, Ulli Gritzuhn, Michael Günther, Lothar A. Harings, Timotheus Höttges Thomas G. Winkler Amtsgericht Bonn, HRB 12276

Empfänger Radio Spectrum Policy Group
Datum 12 July 2006
Seite 3

Executive summary

The switchover from analogue to digital terrestrial television broadcasting based on the DVB-T standard in Europe presents a unique opportunity to use large contiguous bands of freed spectrum resources for potential new services. T-Mobile agrees with the three alternatives proposed by RSPG: increased programme services, services of higher technical quality and electronic communications services other than broadcasting. Enabling a beneficial distribution of resources to each requires appropriate planning with sufficient flexibility from the beginning.

Flexibility within a harmonised framework would support developments to reach the EU Commission's i2010 Initiative goals of increasing broadband access and reducing the "Digital Divide". T-Mobile believes that more flexibility should be applied to the frequency bands considered in this opinion paper. The RSPG should work towards enabling an environment, by the time the switch-over to digital broadcasting is completed, in which access for all market players to contiguous bands of this very valuable spectrum is possible to support the introduction of innovative and diversified services based on fair competition in the market.

T-Mobile puts a consistent emphasis on the expansion of mobile broadband technologies and aims to broaden its services to meet all customer needs. In addition to UMTS streaming, T-Mobile is testing other technologies for the transmission of mobile multimedia services, for example DVB-H. For T-Mobile DVB-H is an innovative high-capacity broadcast technology with the potential to more efficiently distribute digital media content including various interactive options. The interaction of mobile communications and digital TV broadcasting will spark the development of mobile multimedia services in which the strengths of mobile communications and broadcasting come into play.

The UHF bands IV/V are T-Mobile's preferred bands for mobile multimedia services based on the DVB-H standard. T-Mobile urges the RSPG to encourage the Member States to identify two national 8 MHz multiplexes of dedicated spectrum, one for immediate allocation to meet market demand for mobile multimedia services and the second for longer term availability. Political commitment and Member State consensus are critical for an unhampered introduction of services. For DVB-H services return channels are envisioned within the existing mobile communications channels and thus it is not necessary to provide these channels in the UHF bands. To ensure the benefits of harmonisation to EU industry and citizens consideration should be given to inclusion of such allocations in an EU decision.

T-Mobile agrees with the RSPG's identified need for action to review unnecessary constraints in current licences for broadcasting, mobile and fixed services to enable the introduction of multimedia services. With respect to content regulation T-Mobile believes the approach of on-going review of the Television without Frontiers Directive is contrary to the EU's aim to remove obstacles for a rapid introduction of such services. In its current proposal, the revisions could result in regulatory spill-over and double regulation of audiovisual media services (such as VOD, looped content, download and play, interactive services). T-Mobile opposes any extension of the current rules for broadcasting to non-linear services and any new obligations. It should be underlined that the obligations of TVWF do

Empfänger Radio Spectrum Policy Group
Datum 12 July 2006
Seite 4

not apply to an operator acting as a carrier without any role in the editing/publishing of the content, in accordance with the principles of the E-Commerce Directive. The development of different but converging markets, which through their existence increase choice and diversity, should lead to deregulation instead of extending obligations from one market to another.

T-Mobile has provided several contributions and supportive papers to the RSPG and the European Commission in the context of spectrum policy; below we consider the spectrum bands proposed by the RSPG for the provision of multimedia services:

470 – 862 MHz (UHF Bands IV and V)

The UHF bands IV/V are T-Mobile's preferred bands for mobile multimedia services based on the DVB-H standard from a propagation / coverage point of view and from a network cost perspective. As suggested previously, T-Mobile urges the RSPG to encourage the Member States to make two national 8 MHz multiplexes of dedicated spectrum available prior to the complete analogue switch-off date for these services. It would be desirable if special efforts were made to have mobile spectrum available within the next two years: the first multiplex should be for immediate allocation to meet current market demand and the second for longer term availability. To ensure the advantages of harmonisation are met, this reservation should be the subject of an EU decision.

Spectrum harmonised at an EU level in contiguous sub-bands would furthermore improve spectrum efficiency, indoor coverage and roaming functionality, and reduce roll-out costs as well as equipment and network deployment complexity. With the introduction of DVB-H services convergence will take place within the handset using different systems and frequency bands. Thus administrations should be urged to take into account the interference restrictions with GSM services and plan mobile multimedia service multiplexes below 750 MHz (channel 54).

Portable indoor reception is essential for consumer-oriented provision of mobile multimedia services. Thus any allocation should also be made with optimum regulatory flexibility in terms of power level restrictions and interference protection to allow maximum efficiency for the roll-out of such networks.

T-Mobile also agrees with RSPG Members who have identified the need to find ways to cope with the relative rigidity of the ITU processes, as well as the need to look at possible shortcomings of the RRC Plan regarding the technical co-existence of broadcasting and non-broadcasting services. The market must be allowed to make some of the strategic choices regarding the use of the dividend, in compliance with the EU policy approach to increase flexibility and efficiency of spectrum use by decreasing technological and service restrictions where appropriate.

Video will be a key driver of demand for broadband services, however it will be a component of many different applications. The RSPG opinion should encourage Member States and European authorities maximize the benefits of the digital dividend by applying the new spectrum management approach, based on technology and service neutrality.

Empfänger Radio Spectrum Policy Group
Datum 12 July 2006
Seite 5

Although for DVB-H mobile multimedia services return channels are envisioned within the existing mobile communications channels and thus it is not necessary in the UHF bands, the lack of mobile uplink in the UHF band can pose a problem for electronic communication services other than broadcasting. T-Mobile proposes that EC RSCOM as a result of the RSPG consideration of this topic and the RRC-06 outcome considers issuing a mandate to CEPT/ECC to plan for the future co-existence of broadcasting and non-broadcasting services in the UHF bands IV and V especially with regard to interference issues.

1452 – 1492 MHz (L-Band)

T-Mobile is not yet convinced of the value of this spectrum for the implementation of mobile multimedia services. The higher frequency band significantly increases infrastructure cost, particularly in rural locations. Therefore, T-Mobile believes that further analysis of the benefits of the band and suitable applications has to be undertaken, it might be seen as a medium to long term solution for specific wireless applications.

The Maastricht 2002 Special Agreement using fixed channel arrangements of 1.75 MHz fitting the characteristics of T-DAB puts a straight jacket on the use of this spectrum for non-digital audio broadcasting services. The L-band is, however, generally unused and is thus a prime example of the need for new spectrum management tools in the European Union. T-Mobile would welcome EU activities to revise the Maastricht Agreement and the application of more flexibility in this band to allow efficient use of this spectrum for new applications.

Wherever possible spectrum use should be harmonized at the European level. This avoids fragmentation and increases perspectives for economies of scale, consumer benefits, pan-European services, and the growth of the internal market. Therefore, it would be desirable if there was a consistent EC policy in place before some Member States start selling L Band spectrum (e.g. the UK) already next year.

Other relevant frequency bands not allocated to the broadcasting service

The RSPG considers the bands identified for IMT2000 at 2GHz and 2.5GHz for the provision of mobile multimedia services. T-Mobile believes that these bands are at too high frequency for an efficient nationwide implementation of a mobile multimedia services. Nonetheless, the bands are being used for video streaming and other multimedia services like MBMS, which has already been tested by some 3G operators in these bands and it is under consideration in 3GPP.

Conclusions

T-Mobile believes that mobile multimedia services are a promising new type of service fostering growth and innovation in Europe. The RSPG should therefore provide the necessary regulatory certainty and investment incentives by establishing reliable frequency designations for mobile multimedia services in the UHF bands. RSPG should encourage national regulators to make frequencies available prior to the complete digital switchover and to make the switchover and digital dividend a policy priority.

T-Mobile supports the intention to increase flexibility of spectrum use in the bands considered in this consultation. New licences for mobile multimedia services should be issued and existing broadcast licenses should be reviewed to allow for mobile multimedia services and other electronic communication services in the existing broadcasting bands on a technology and service neutrality basis. Enough spectrum in the bands presently allocated to broadcasting should be made tradable to counteract tendencies of spectrum hoarding among current users. Furthermore, T-Mobile supports limiting constraints and obligations for mobile multimedia services to the minimum required to enable optimal competition on the network and the service level.

In the case of the future use of the digital dividend and possible revisions in the Maastricht Agreement a harmonised EU framework is imperative for pan-European services.

T-Mobile agrees with the RSPG conclusions that the convergence of broadcast and electronic communications services increases the regulatory complexity between different types of legislation. With regard to content regulation the revision of TVWF in its current form risks compromising a successful introduction of mobile multimedia services in Europe. The development of different but converging markets, which through their existence increase choice and diversity, should lead to deregulation instead of extending obligations from one market to another.

Lastly, the RSPG should encourage Member States to restructure regulatory responsibilities to meet the needs of converging broadcast and telecommunication services and to foster simplified legislation and clear administrative responsibility.